

CLAIMS:

1. A method of controlling a set of transcoding channels ($TC[1]$ to $TC[n]$), a transcoding channel ($TC[i]$) allowing an input compressed data signal ($ICS[i]$) encoded at an input bit rate ($Rin[i]$) to be converted into an output compressed data signal ($OCS[i]$) encoded at an output bit rate ($Rout[i]$), said method of controlling comprising :

5 a step of computing an indicator of a compressed data quality for the respective transcoding channels, said indicator being computed from the input compressed data signal ($ICS[i]$),

10 a step of allocating the output bit rate ($Rout[i]$) to the transcoding channel ($TC[i]$) from a total output bit rate ($Rtot$), its corresponding indicator and a sum of the indicators of the transcoding channels.

15 2. A method of controlling a set of transcoding channels as claimed in claim 1, wherein the indicator is computed from an average, over a set of encoded pictures, of a function of an average quantization scale over a picture and a number of bits used to encode the same picture.

20 3. A method of controlling a set of transcoding channels as claimed in claim 2, wherein the indicator is computed from a weighted average of a set of the averages calculated over the set of encoded pictures.

4. A controller ($CONT$) for controlling a set of transcoders ($TC[1]$ to $TC[n]$), a transcoder ($TC[i]$) allowing an input compressed data signal ($ICS[i]$) encoded at an input bit rate ($Rin[i]$) to be converted into an output compressed data signal ($OCS[i]$) encoded at an output bit rate ($Rout[i]$), said controller comprising :

25 means for computing an indicator of a compressed data quality for the respective transcoders, said indicator being computed from the input compressed data signal ($ICS[i]$),

means for allocating the output bit rate ($Rout[i]$) to the transcoder ($TC[i]$) from a total output bit rate ($Rtot$), its corresponding indicator and a sum of the indicators of the transcoders.

5 5. A data multiplexing system comprising :

a set of transcoders ($TC[1]$ to $TC[n]$) for converting input compressed data signals ($ICS[1]$ to $ICS[n]$) encoded at an input bit rate ($Rin[1]$ to $Ri[n]$) into output compressed data signals ($OCS[1]$ to $OCS[n]$) encoded at an output bit rate ($Rout[1]$ to $Rout[n]$),

10 a controller (CONT) for controlling the set of transcoders and comprising :

means for computing an indicator of a compressed data quality for the respective transcoders, said indicator being computed from the input compressed data signal ($ICS[i]$),
means for allocating the output bit rate ($Rout[i]$) to the transcoder ($TC[i]$) from a total output bit rate ($Rtot$), its corresponding indicator and a sum of the indicators of the transcoders,

15 a multiplexer (MUX) for providing a multiplexed data signal (MS) at the total output bit rate ($Rtot$) by multiplexing of the output compressed data signals ($OCS[1]$ to $OCS[n]$).

20 6. A computer program product for a controller (CONT) that comprises a set of instructions, which, when loaded into the controller, causes the controller to carry out the method of controlling as claimed in claims 1 to 3.